BULLETIN OF THE

TAYLOR SOCIETY

A SOCIETY TO PROMOTE THE SCIENCE AND THE
ART OF ADMINISTRATION AND OF MANAGEMENT

ABSTRACTS OF PRELIMINARY REPORTS
OF
THE COMMITTEE ON THE QUESTIONNAIRE, THE COMMITTEE ON THE ORGANIZATION AND THE FUNCTIONS OF THE SALES ENGINEERING DEPARTMENT
AND
THE COMMITTEE ON THE ORGANIZATION AND THE FUNCTIONS OF THE SALES OPERATING DEPARTMENT

PRESENTED AT THE ANNUAL MEETING
OF THE
TAYLOR SOCIETY
NEW YORK, DECEMBER 3, 1920

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29 W. Thirty-Ninth St.,
New York

DECEMBER, 1920

VOL. V, No. 6

TAYLOR SOCIETY

ENGINEERING SOCIETIES BUILDING
29 WEST THIRTY-NINTH ST., NEW YORK

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OBJECTS OF THE SOCIETY

(Extract from the Constitution)

The objects of this Society are, through research, discussion, publication and other appropriate means:

1. To secure an understanding and intelligent direction of the principles governing organized effort for the accomplishment of industrial and other social purposes for the mutual benefit of

A. The Community
B. Labor.
C. The Manager
D. The Employer

2. To secure the gradual elimination of unnecessary effort and of unduly burdensome toil in the accomplishment of the work of the world.

3. To promote the scientific study and teaching of the principles governing organized effort, and of the mechanisms of their adaptation and application under varying and changing conditions.

4. To promote general recognition of the fact that the evaluation and application of these principles and mechanisms are the mutual concern of the community, labor, the manager and the employer.

5. To inspire in labor, manager and employer a constant adherence to the highest ethical conception of their individual and collective social responsibility.

(Continued on inside back cover)

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ENGINEERING SOCIETIES BUILDING
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VOL. V DECEMBER, 1920 No. 6

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2. Report of the Committee on the Organization and Functions of the Sales Engineering Department.
3. Report of the Committee on the Organization and Functions of the Sales Operating Department.

COMMENT

THIS last number of Vol. V is the smallest issue of the BULLETIN which has appeared for a long time and is devoted to but one subject; yet we are confident it will be valued highly and will be studied by executives more thoroughly than have many of the larger issues.

TALL oaks from little acorns grow. At the round-table Conference on "Scientific Management Applied to the Sales Department," held at the May meeting in Rochester, was planted a little acorn. At the Conference of Sales Executives held in New York on June 25, the little acorn had grown into a healthy sapling. It appears likely to become a sturdy young tree by the time the reports contained in this issue are rendered. We hope it will there be proved that the acorn was planted in such fertile soil that the young tree is sure to become a tall oak. That depends upon the sales executives more than upon the Taylor Society. Every sales executive who is interested in this investigation and who desires to promote it, is invited to indicate his desires to the Society.

IT is acknowledged that the preliminary reports of committees which appear in this issue represent no more than a beginning. The reports themselves state explicitly that no new principles or methods have been discovered. The committees have been able to accomplish only those steps which must be first (and which are most important) in all such inquiries; ascertain what is already achieved in the best practice and derive therefrom useful generalizations as a basis for further inquiry. The useful generalizations which seem to be brought out in these reports are: first, that planning and performance are the two major functions in distribution as well as in fabrication; second, that they are the two major functions in an enterprise as a whole; and third, that planning for the enterprise as a whole is more closely related to distribution than to fabrication for the reason that the motive for an industrial enterprise arises out of the demand of consumers, with whom the distributing organization has the closest contact. Hence the term "sales engineering."

AS is stated in the committees' reports, other terms than "sales engineering" are found to be in use,—such as "sales planning" and "merchandise control,"—to designate this major function. The use of the term "sales engineering" in these reports is largely an accident, and the question of terminology is an open one. In the course of committee meetings, although the organizations represented by several of the members use other terms, no question was raised of the undesirability of the term employed. We have, however, received letters from a number of persons who had received programs of the meeting, objecting to or questioning the use of the term "engineering" in connection with "sales," and expressing preference for the combination "sales planning." In due time, after the nature of that which is to be named is agreed upon and precisely defined, the problem of selecting a standard name can profitably be taken up.

IN the mean time, for the benefit of those who are especially interested in the question of nomenclature, the following suggestions are offered:

Those who prefer the term "sales planning" to the term "sales engineering" argue somewhat as follows: On the one hand the major function described is essentially a planning function of the sales department or of the business as a whole, while on the other hand the term "engineering" has by use in mechanical, civil, electrical and other fields of engineering come to be associated with exact science and usually with structural, metal-working, electrical and similar industries; that the term "sales engineering" might perhaps with propriety be used in industries fabricating and distributing machines, hoisting and conveying machinery, tools and hardware, but not in industries manufacturing and distributing, for instance, cloths, clothing, shoes, food products, and drugs; furthermore, that in many industries, as in the making of tanks, the term "engineering" is already appropriated by a unit of the sales organization concerned with designing the product to individual order and erecting or installing it.

To which those who favor the term "sales engineering" make reply: That the preemption of "sales engineering" for that unit of the sales department which designs and erects is not so important as the preemption of the term "sales planning" for the unit of the sales operating organization which plans detail selling operations in accordance with master schedules; that the term "engineering" has come to have a larger meaning than that which restricts its use to the older engineering professions and industries; and that the distinguishing factor in the use of the latter term is that it is applicable to any function involving investigation, research, designing and planning, and requiring in its personnel studious, scientific aptitudes, irrespective of the nature of the product resulting.

POSSIBLY the following excerpt from an article by John E. Otterson, President of the Winchester Repeating Arms Company, published in *The Annals of the American Academy of Political and Social Science* of September, 1919, may throw some light upon the point of view of those who present this latter argument. Discussing the classification of individuals for organization purposes, Mr. Otterson says:

"Men are of two broad general types, namely: the engineering type and the executive type.

"The enginering type of man works for the solution of a single technical or engineering problem and is concerned with the determination of the solution rather than the application of that solution to practical activities. The true type has the capacity to concentrate continuously on a single problem until the solution has been reached. He is interested in the determination of cause and effect and of the laws that govern phenomena. He is disposed to be logical, analytical, studious, synthetical and to have an investigating turn of mind. The predominating characteristic that distinguishes him from the executive is his ability to concentrate on one problem to the exclusion of others for a protracted period, to become absorbed in that problem and to free his mind of the cares of other problems. He does not submit readily to the routine performance of a given quantity of work. He deals with laws and abstract facts. He works from text books and original sources of information. Such men are Edison, Steinmetz, the Wright brothers, Curtiss, Bell, Pupine, Fessenden, Browning. These men are the extreme of the engineering type, they have enormous imagination, initiative, constructive powers. Mr. Taylor was in reality an engineer rather than an executive. He applied his wonderful inventive genius to the invention of management methods.

"The executive type takes the conclusions of the engineer and the laws developed by the engineer and applies them to the multitude of practical problems that come before him. His chief characteristic is that he works with a multitude of constantly changing problems at one time. He concentrates on one problem after another in rapid succession. In many instances he has not the time to obtain all of the facts and he must arrive at a conclusion or make a decision based upon partial knowledge. He must rapidly assimilate available facts and fill in what is lacking from the ripeness of his own experience, frequently calling upon his powers of judgment, and even of intuition. He is a man of action, boldness, ingenuity, force, determination, aggressiveness, courage, decision; he is possessed with the desire to get things done, impatient of delay. He works from a handbook, a newspaper, or nothing at all. Such men are Schwab, Goethals, Pershing, Farrell, Hindenburg, Hoover."

Now those who favor the term "sales engineering" insist that the function designated in these reports by that term requires personnel of the engineering (as contrasted to the executive) type, because of the nature of the processes involved; and that just as there is a function of production engineering with a direct and close relation to production operation (execution) there is also a function of sales engineering having a direct and close relation to sales operation (execution). These arguments are worthy of serious thought.

WHATEVER the decision with respect to the word "engineering," the editor as he has sat with these committees has been impressed with the belief that he has been witnessing an historic event; sales executives—practical, operating executives—have been meeting to pursue their investigations in the committee rooms of an *engineering* building under the auspices of an *engineering* society.

ABSTRACT OF A PRELIMINARY REPORT

of the

COMMITTEE ON THE QUESTIONNAIRE

PRESENTED AT THE ANNUAL MEETING OF THE TAYLOR SOCIETY
NEW YORK, DECEMBER 3, 1920

FOREWORD

A RESOLUTION passed at the Sales Executives' Conference of June 25 called for the appointment of a committee which should secure, through a questionnaire addressed primarily to the manufacturing organizations represented, data concerning current practice in organization for and the conduct of sales operations, with reference particularly to the coordination of selling and production. The committee is made up of the chairman of the other committees and two members at large, and to it has been given the additional duty of acting as a planning committee for the work of all committees established by vote of the conference.

Painstaking work by a sub-committee resulted in a tentative questionnaire which was so comprehensive that it was concluded not to send it out without most careful working-over. It was decided, however, to send out immediately, to secure data for guidance in working over the comprehensive questionnaire, a brief set of questions which would yield evidence as to whether in practice there is special effort to coordinate sales and production and recognition of a functional distinction between sales engineering (planning, merchandising, etc.) and the conduct of sales operations. The following is a report on this preliminary questionnaire.

This questionnaire was sent to the firms represented at the June conference—fifty-two—and at the time of the preparation of this report for printing twenty, or about two-fifths, had reported.

It should be observed that these firms are fairly representative of the best in general management rather than of the average. There has no doubt been a double selective force at work; those attracted by such a conference as that of June 25 would be representative of energetic and inquiring firms; of that group, those who had data available for prompt response to the questionnaire would be representative of firms which have the habit of inquiry and self-analysis.

They represent a wide range with respect to the nature of the products, the quantity and value of output, the number of personnel engaged in factory operations and the number engaged in marketing operations.

The Committee believes that the results of the inquiry, although meager, are not without value, especially as establishing a "toe-hold" for the first steps towards scaling a veritable precipice of difficulties ahead.

RESULTS OF THE PRELIMINARY QUESTIONNAIRE

I. SALES ADMINISTRATION

The function of determining general sales policy; of approving general plans and schedules which have been worked out and proposed; of settling (by the exception principle) matters which cannot be settled by those executives more directly concerned with sales engineering and the conduct of sales operations.

1. Where in your organization is the final authority for determining or approving a sales plan or campaign? (such as Directors; President; General Manager; Committee of department heads, etc.)

Four replies state that this responsibility is in the directors; four that it is in an executive committee of directors who are heads of operating departments; one that it is in a committee of operating department heads; one in an executive committee; one in the President; one in a Vice-President in charge of sales; two in the General Manager; one in the General Sales Manager; one in the President and General Manager; two in the President and Sales Manager; one in the Sales Manager who carries exceptional matter to the General Manager; one reply states "no organized method—we 'cut and try'."

2. Do plans come to the determining authority (accompanied by necessary information) from some

special indvidual or department of your organization? (Such as Sales Engineering Dept.; Merchandising Dept.; Merchandise Manager; Sales Research Dept.; Promotion Dept.; etc.)

Six replies state that such plans come from special departments (Sales Engineering, Sales and Planning, Merchandise Council, Sales Statistics); three that such plans come from various sources; one from a committee concerned principally with the financial budget; one as a consensus of opinion of department heads; three from the Sales Manager; one each from Merchandise Manager and Asst. Sales Manager; three state that there is no organized information sent to authority determining sales plans.

3. Do these plans come to the determining authority for its consideration and approval in the nature of definite schedules: (a) which outline a sales plan or campaign only; (b) which outline a coordination of sales, production (or purchasing) and financial actions involved?

Eight replies state that plans aim at complete coordination of sales, production and finances; one that such coordination is limited; one that such coordination is chiefly financial; three that a sales plan only is attempted; three that sales plans are made, with such a rough checking against factory capacity as the General Manager or Sales Manager can make without special detail information; two that there are no definite sales plans.

II. SALES ENGINEERING

Also called Sales Planning, Merchandising; Merchandise Control; Sales Research; Sales Promotion; Sales Development; etc. The function of devising sales plans for consideration of the ultimate sales-policy-determining authority, involving the study of markets, old products, new products, competition, production capacity, etc.; involving also possibly the preparation of master schedules embodying the sales plan.

1. Do you recognize the devising of sales plans as a function distinct from actual selling?

Interpreting this to mean general plans and master schedules, seventeen replies state that this is a distinct function; three that it is not.

2. Does your organization provide for a department or staff which is responsible for the function of devising sales plans? What is the name given by you to the department?

Nine firms state that they have no such separate department or staff; one that such a staff is being organized; ten that the function is recognized and provided for by special departments such as Sales Engineering, Sales Statistics, Sales Promotion, Sales Planning departments; one by a committee of the Directors consisting of department heads; three by special executives; one by outside experts.

3. Does the sales engineering or planning department, in its research, study: (a) Markets; (b) old products; (c) new products; (d) competition; (e) plant capacity?

Of those firms which make special provision for sales planning, eight consider all of these phases of the problem; four additional consider all except plant capacity; five firms report that these matters are taken into consideration by the General Manager and department heads; five state specifically that no special study is made of them.

4. Does the sales planning department limit its activities to research and reports; or does it work out specific written plans in the nature of master schedules which provide for coordination of sales, production and finance?

Five firms reply that in addition to research, master plans and schedules are prepared which coordinate sales, production and finance; one that such work is just beginning; one that master schedules are prepared without much research; one that the scheduling is limited principally to finances; three that the Sales Manager or his associates prepare rough schedules; seven that they can claim neither research nor the preparation of master plans and schedules.

5. If you have not a functionalized sales engineering or planning department or staff, state how you provide for the performance of this function.

Of those firms which do not provide for sales engineering or planning by special departments or staffs, four state that sales planning is a responsibility of the Sales Manager, either alone or in consultation with salesmen; one, of an executive committee which has additional duties; one, of a Vice-President in charge of sales; one, of the President's office; one, of the Superintendent of the Factory who watches shipments, orders and production.

III. SALES OPERATING

The functions of carrying out sales plans, involving the selection, training and direction of salesmen; the working out of detail plans to give effect to master sales plans; the securing and preparation of sales materials; records of sales performance and cost; contacts with customers; etc.

1. Do you recognize this as a function distinct from sales engineering or planning?

Sixteen of the firms replying state that sales operating is recognized as a distinct function; one that it is coming to be so recognized by them; two that it is not so recognized.

2. Is this function performed by a department or unit distinct from that which performs the function of sales engineering or planning?

Thirteen replies state that sales operating is not performed by a separate department; four state that it is performed by a separate department; three that the separation of sales engineering and operating is only partial.

3. Does your sales operating department have charge of the following functions (if not, state what department has charge of each): (a) selection of salesmen; (b) training of salesmen; (c) direction of salesmen; (d) "educating" of customers; (e) advertising; (f) warehousing; (g) shipping; (h) traffic?

The replies to this question are most interesting. Nineteen state that the selection of salesmen, the training of salesmen, the direction of salesmen and the "educating" of dealers are in charge of the Sales Operating Department, with the exception that one places the training under the Sales Engineering Department and another states that they have practically no training of salesmen and "education" of dealers. Eleven place advertising under Sales Operating; one under a Merchandise Department; one under Sales Engineering; two in a distinct Advertising Department. With respect to warehousing, four place it under Sales Operating; one under Sales Engineering; one under the Treasurer; and four under the factory management. Shipping is placed by only two under Sales Operating; by two under the Treasurer; and by seven under the factory management. Traffic is placed by three under Sales Operating; by two under the Treasurer; by one under the Accounting Department; and by five under the factory management. One reply states that all of these duties are under the General Manager.

4. Does your organization provide for a unit in the sales operating department which takes the master sales plans and schedules and works out detail plans or schedules for carrying out the master plans; i. e., a planning of the actual work of performance?

Ten firms state that they have no such unit in the Sales Department for detail planning. Two state that they have such unit; two state that they have such unit in embryo; one that it is in contemplation. Four state that the Sales Manager makes detail plans for his department.

5. Does this planning of actual performance involve: (a) analysis of master plans as first step in making detail working plans; (b) laying out of detail working plans in the form of written schedules; (c) checking of reports of performance against written detail working plans?

Six firms state that all the phases of planning above indicated are carried out in the Sales Department; one that all three are in contemplation; one that (a) and (b) but not (c) are carried out; and one that (c) but not (a) and (b) is carried out.

6. Does your sales operating department provide for the study of the art of personal selling for the purpose of improving the salesmen's methods?

Twelve firms state that study is made of the art of personal salesmanship; four that it is not; two that it is done superficially; one that it is a responsibility of the Sales Manager.

7. Have you ever made a time-study of a salesman's work, or any kind of job analysis of his work?

Eleven firms reply that no job analysis of the salesman's job is made; five that there is such analysis without time study; three that there is such analysis including time study.

IV. GENERAL

1. What are the functions of your sales manager; does he have supervision of sales engineering or planning, as well as of the selection and direction of salesmen?

Thirteen replies state that the Sales Manager supervises both sales planning and sales execution, even when the routine of planning is performed by a distinct unit. Three state that he is responsible for execution only. One states that he is primarily responsible for execution, but participates in planning by his presence on a planning committee. One states that a Distribution Manager is responsible for both planning and execution and that under him are sales managers who are responsible for execution only.

2. Do you believe the function of sales engineering or planning requires a type of personnel different from that required by the function of actual selling? If so, what are the differences?

Eighteen replies express the opinion that sales engineering or planning requires a personnel different in temperament from that required in sales operating; one that the difference is not great; one that "it does not in our business but probably does in most." There seems to be general agreement that actual sales operations require the vigorous, motor type of man and sales engineering or planning the engineering, studious, analytic type, and that the latter must also possess imagination.

3. Do you make provision for effective close cooperation between the sales department and the production department in order to keep the output of both departments in balanced relation?

Sixteen firms make serious effort to coordinate selling and production; one is just beginning to attempt coordination; one states that the production manager does the coordinating; one that production and sales seem "practically unrelated."

4. Is the advertising department subordinate to the sales department, or coordinated?

In eleven replying firms advertising is subordinate to the sales department; in six it is coordinate, the inference being that they are coordinated by the General Manager. In one they are practically unrelated, "the sales manager knowing nothing of advertising until he sees copy in publications."

A close analysis of these replies will disclose many discrepancies in details. To make such an analysis and to draw conclusions is not attempted. The tabulated raw material of the questionnaire is presented for what it is worth. In itself it is believed to be worth something; as a guide for the committee and others in preparing future questions, especially as a lesson in the necessity of precise terminology and the clear framing of questions, it is of great value.

Also there would be much of greater value were it possible to disclose the replies of individual firms. Of those firms which recognize and in their organizations provide for the difference between sales engineering or planning and sales operating, the replies to detail questions are illuminating.

Willard E. Freeland, Chairman
Winchester Repeating Arms Co., New Haven, Conn.
Charles J. Crockett,
Printz-Biederman Co., Cleveland.
Charles P. Staubach,
Burroughs Adding Machine Co., Newark, N. J.
E. St. Elmo Lewis,
Campbell-Ewald Co., New York.
Henry Wood Shelton,
Consulting Engineer in Management, Philadelphia.

H. S. Person,
Managing Director, Taylor Society, New York.

ABSTRACT OF A PRELIMINARY REPORT

of the

COMMITTEE ON THE ORGANIZATION AND FUNCTIONS OF THE SALES ENGINEERING DEPARTMENT

PRESENTED AT THE ANNUAL MEETING OF THE TAYLOR SOCIETY
NEW YORK, DECEMBER 3, 1920

FOREWORD

FOR convenience in this report the term Sales Engineering is used as descriptive of the major function discussed. Work of this character, in whole or in part, is now being carried on in organizations under such titles as Sales Technical Division, Sales Promotion, Merchandising, Merchandising Control, Sales Research, Sales Planning, Development Department, etc. It is not important at this time to discuss the name, as the choice of a name will depend upon the organization, personnel and character of the individual enterprise.

This report is designed to stimulate and guide discussion of a comparatively new phase of the work of a distributing or marketing organization. The committee presents a preliminary report only; it cannot hope at this time to present other than a basis for discussion of a subject on which only meagre pioneer work has been attempted.

Every modern sales manager has of necessity been compelled to carry on some or all of the phases of distribution outlined herein. The subject matter is new only in the attempt to segregate into a distinct major function that part of his work which has to do with research, master planning and master scheduling. It is a definite effort to bring recognition of a major function which shall have to some degree the same relation to distribution as that of manufacturing engineering to factory operation.

A point of similarity is the necessity for selecting for the performance of these functions, personnel which possesses the student, planning, creative aptitude and ability. It must be noted, however, that the manufacturing engineering function is concerned almost wholly with tangible things, whereas sales engineering is concerned with both tangible and intangible things. The first is concerned largely with materials and controllable processes; the second with fallible records and uncontrollable human impulses and activities. The first can frequently test its plans on a laboratory scale with minimum expenditure of money and loss of time, employing pure science; the second must incorporate in its plans psychological and economic laws, which are none too well defined and understood and of which the verity and applicability can only be ascertained after considerable loss of time and expenditure of money.

This frank statement of the differences in the certainty of results and the possibility of scientific checks on operations does not destroy the similarity of the relations of the two engineering functions to the operating functions to which they are respectively related, and it does not limit the field or the possibilities of sales engineering. It should serve to emphasize the necessity for the recognition of the engineering phase of sales work as a distinct function and of the intensive use of all the sciences now available, thereby making possible the application of scientific analysis and synthesis to the problems of distribution.

In our present development of manufacturing and merchandising, the cost of distribution or marketing usually far exceeds the cost of production, and the success of the application of scientific management to production points a plain path for management to pursue in its efforts to cut the costs of distribution.

TENTATIVE CONCLUSIONS

1. The conditions or causes which have led to the establishment of engineering and operating as separate major functions in the production of products exist also with respect to distribution and indicate the necessity for the recognition of engineering and operation as major functions in the production of sales.

2. Master planning and scheduling can properly be considered sales engineering, delegating detailed

planning and scheduling as secondary functions of operation. If one concedes that the distributing organization is the one that usually and naturally originates projects involving the whole plant organization, then it becomes obvious that a research and master planning and scheduling function must have a close and sympathetic relation with the distributing organization, hence the choice of the name "Sales Engineering" for this major function.

3. The sales engineering function presents at least three distinct phases:
   (a) Field research.
   (b) Technical assistance
   (c) Master planning and scheduling.

4. It should be recognized that the major function of sales engineering is to analyze, plan and schedule future projects and that the planning and scheduling of current projects is a function of the operating divisions.

FIELD RESEARCH ACTIVITIES

As a field research function, sales engineering should make its services available for all parts of the plant organization. Some specific things it can usually include in its research activities are:

1. Products:
   - To be added
   - To be eliminated
   - Changes
   - Standardization
   - Present uses
   - New uses
   - Seasonal factors
   - Territorial factors
   - Trade reactions
   - Competitive products
2. Marketing Policies and Methods:
   - Present trade channels
   - Potential trade channels
   - Trade customs
   - Trade reactions
   - Competitors' activities
   - Standardization
   - Containers and packing
   - Quotas and statistics
   - Prices and margins
   - Present markets and volumes
   - Potential markets and volumes
   - Assistance to customers
   - Salesmen's training
   - Warehouse and branch locations
   - Trade organizations
3. General Research:
   - Administrative and management problems
   - Research for all operating departments

TECHNICAL ACTIVITIES

The personnel of sales engineering should be such that it can be of technical assistance to the entire business organization. While sales engineering utilizes and contributes to the entire resources of the business organization, it is essential that no duplication of effort be brought about by the segregation of this major function; in fact, this segregation of sales engineering should invariably tend to diminish duplication of work.

The range of research and other activities involved in sales engineering is indicated by the following synopsis; it is possible that in a large organization some of them may assume such importance as to be recognized as separate functions:

PRODUCTS:
- Types and Sizes
  - Selection
  - Standardization
  - Approval
- Materials
  - Suggestion
  - Approval
- Finishes
  - Suggestion
  - Standardization
  - Approval
- Markings
  - Selection
  - Standardization
  - Approval
- Packing
  - Wrapping
  - Put-ups
  - Containers
    - Suggestion
    - Standardization
    - Approval

ADVERTISING:
- Furnish data on
  - New products
  - Product changes
  - New uses
  - New markets
  - Trade reactions
  - Competitors' activities
  - Prices
  - Trade customs
  - Seasonal factors
  - Territorial factors

SELLING:
- Prices and Margins
- Salesmen's Compensation
  - Investigation of methods in practice
  - Suggestions for alternative methods
- Selling Equipment
  - Salesmen's
    - Design or selection

- Dealers
  - Suggestion
  - Design
- Seasonal Factors
- Territorial Factors
  - Determine limits and causes therefore
  - Suggest methods of overcoming
- Trade Resistance
  - Determine causes
  - Suggest methods of overcoming
- Economic Factors or Trends
  - Ascertain
  - Report probable influence
  - Suggest methods of overcoming

SALES SERVICE:
- Ascertain deficiencies
- Suggest remedies
- Suggest other service activities

MARKETS OR SALES FIELDS:
- Report changes
- Discover new markets
- Suggest new policies or methods

COMPETITORS' ACTIVITIES:
- Watch and report
- Suggest methods of combating

TRADE ORGANIZATIONS:
- Report activities
- Report probable effect on sales policies
- Determine possibilities of cooperation.

LEGISLATION:
- Watch and report
- Suggest necessary action

MERCHANDISE STOCKS:
- Regularly check and report
- Suggest necessary action

PATENTS AND COPYRIGHTS:
- Watch and report
- Suggest necessary actions

STATISTICS:
- Suggest necessary compilations
- Analyze and report changes or trends
- Interpret and suggest necessary action

COMPLAINTS:
- Analyze
- Compile records
- Suggest necessary action

MASTER PLANNING AND SCHEDULING

Sales engineering should become the coordinating function of the entire business. In this field it can relieve the administrative and managerial executives of many of their most troublesome and time-consuming problems. In this activity sales engineering should strive to be months ahead of any of the operating divisions. Only thus can the purchasing, financial, personnel and production divisions have adequate time to plan for their respective activities.

The synopsis below is only to suggest some of the steps in a master plan and schedule. The variations necessary to meet the problems of specific industries are almost infinite.

NEW PRODUCTS:
- Plan
  - Types
  - Sizes
  - Materials
  - Finishes
  - Markings
  - Packings

NEW AND OLD PRODUCTS:
- Plan and schedule initial requirements
- Plan and schedule yearly and monthly requirements
- Plan and schedule general marketing policies and methods
- Plan and schedule sales service activities
- Plan and schedule general advertising policy
- State seasonal and territorial limitations
- Plan and schedule general activities of each division affected by project to establish order of work and definite responsibilities.
- Plan and schedule warehouse distribution
- Plan dealers' selling equipment
- Plan salesmen's selling equipment

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ABSTRACT OF A PRELIMINARY REPORT

of the

COMMITTEE ON THE ORGANIZATION AND FUNCTIONS OF THE SALES OPERATING DEPARTMENT

PRESENTED AT THE ANNUAL MEETING OF THE TAYLOR SOCIETY

NEW YORK, DECEMBER 3, 1920

FOREWORD

THIS report is preliminary only. The committee desires that it be clearly understood that it does not feel that it has discovered new principles or new method, or made new conclusions, relative to the performance of sales operations.

The committee feels that its work has been only a beginning; that much further study and thought is essential; particularly that the aid of many sales managers is now required for the furtherance of its investigations. It is as a challenge to sales managers to offer such aid, and to provide a common starting point for such aid, that this preliminary report is rendered.

The committee believes that its first problem was not to discover new methods, but to attempt to discover the *functions* as represented by existing methods, in sales operating. The report attempts to present in summarized form the functions which seem to be inherently present in successful sales operating.

Except for the assumption of certain major departments this report makes no assumption that the performance of the functions summarized must be by distinct departments, sections or branches of an organization. The report attempts to discuss the problem in terms of major and subsidiary *functions.*

For the benefit of those who were not present at the meeting of June 25, it should be stated that the approach to the problem was definitely set by the following question: "May there be scientific management in the conduct of sales operations corresponding to the scientific management which has been developed in the production department"? Therefore throughout the report selling functions are compared with production functions.

TENTATIVE CONCLUSIONS

1. Selling seems to break down into two major functions, distinct in their nature and in the types of personnel required for their performance:

(a) The making of larger plans for the marketing of a product, involving analysis of the market and the product, the preparation of master schedules, and the coordination of production, financial and selling resources; called Sales Engineering, Sales Planning, Merchandising, Merchandise Control, etc., and in many instances cared for by advertising or selling agencies:

(b) The actual conduct of the selling operations, involving the detail planning of selling operations, the selection, training and direction of the sales force, the detail planning and conduct of selling operations when salesmen are not used, and all contacts with the customer; called in this report Sales Operating.

2. Sales Operating seems to break down into two principal functions:

(a) The detail planning for, the preparation of materials for, and the supervision and control of, all elementary selling processes. (This function breaks down into elementary functions or processes.)

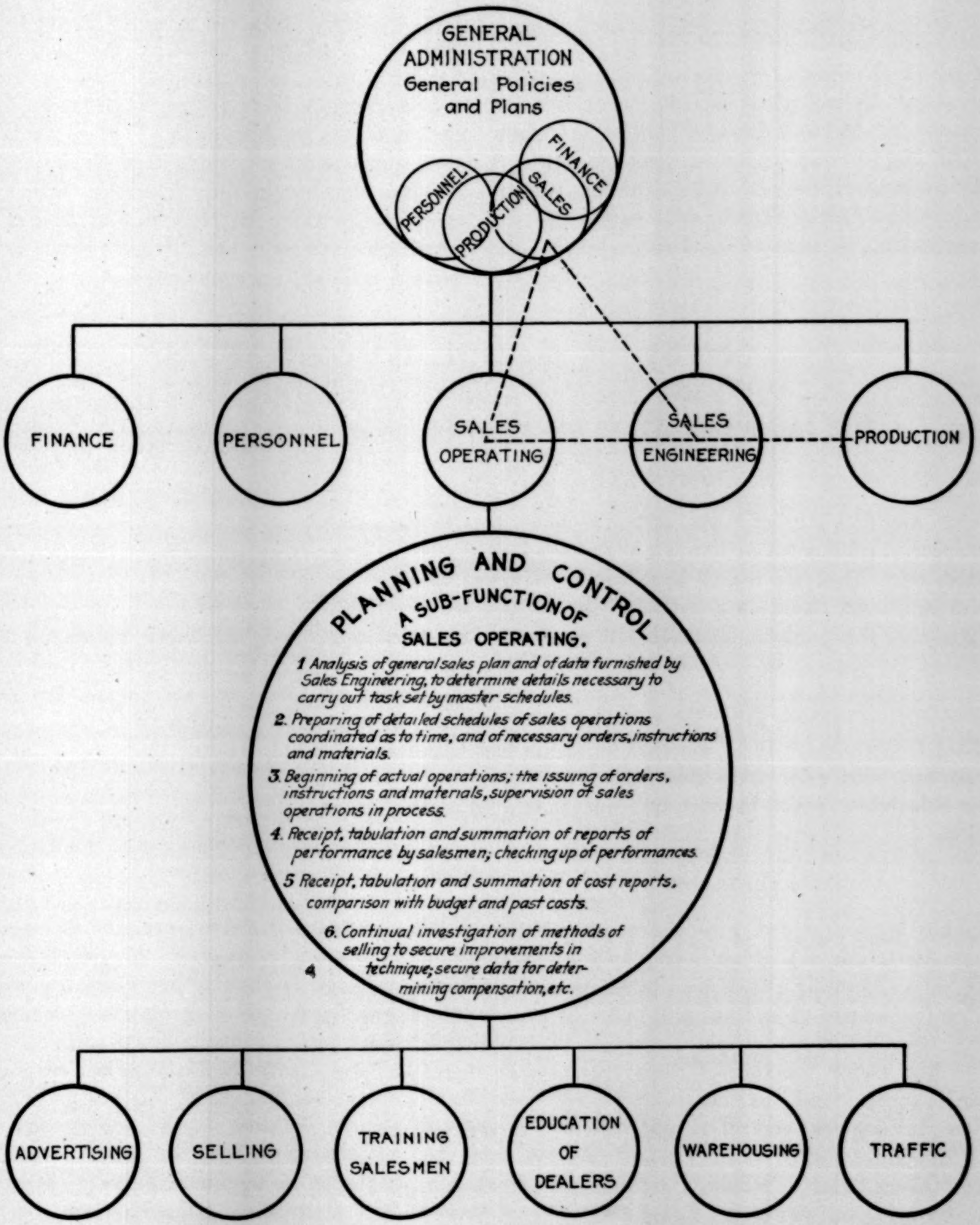
(b) The actual conduct of sales operations in accordance with the planning and control established in 2a above. (This function also breaks down into elementary functions and processes.)

This report is concerned with 2a only; investigation of 2b is to come later.

3. Conclusions 1 and 2 are the result of a study of a variety of selling departments, and present functions which seem to be inherent in selling; they are not, however, recognized by every selling organization and their execution provided for by functionalized parts of the organization. In one organization one or more functions, in another organization other functions, are recognized and defined.

4. Taylor has shown by his work in production that proper results can be brought about only by sys-

CHART OF SALES OPERATING FUNCTION AND ITS RELATIONS WITH EMPHASIS ON THE PLANNING AND CONTROL SUB-FUNCTION



1 Analysis of general sales plan and of data furnished by Sales Engineering, to determine details necessary to carry out task set by master schedules.

2. Preparing of detailed schedules of sales operations coordinated as to time, and of necessary orders, instructions and materials.

3. Beginning of actual operations; the issuing of orders, instructions and materials, supervision of sales operations in process.

4. Receipt, tabulation and summation of reports of performance by salesmen; checking up of performances.

5 Receipt, tabulation and summation of cost reports, comparison with budget and past costs.

6. Continual investigation of methods of selling to secure improvements in technique; secure data for determining compensation, etc.

tematized—not system-ized—work, in which plans, functions, duties and execution are all clearly defined. This is what your committee desires to see done for selling.

EXPLANATION OF THE CHART

1. *General Administration* determines or approves all general policies and plans, including general sales, production, personnel and financial policies and plans.

2. *Sales Engineering* studies markets and products and recommends to General Administration general or specific, continuous or limited, sales campaigns. Its recommendations, as adopted by General Administration, take the form of general schedules which coordinate selling, production, personnel and financial operations. These general schedules pass to the various operating departments for execution, and constitute the master task for their coordinated execution.

3. *Sales Operating* receives these general schedules, or master task, and proceeds to execution. The first step is planning details of execution and establishing controls for execution; breaking the task up into elementary tasks for performance by functionalized branches or individuals. The elements of planning and control are emphasized on the chart.

After detail operating schedules, orders and instructions are prepared; these pass to those respectively responsible for their execution in detail: advertising, selling, training, warehousing, traffic, etc.

ELEMENTS OF THE PLANNING AND CONTROL FUNCTIONS OF THE SALES OPERATING DEPARTMENT

THE SALES OPERATING DEPARTMENT

COMPARISON WITH THE PRODUCTION DEPARTMENT

PRELIMINARY

Before the first step of actual selling is taken, a sales plan, general or specific, continuous or limited, is approved by the administrative authorities. This plan should have been worked out by some part of the organization, based on a detailed research into market conditions, study of the product, financial and production resources, etc. The part of the organization which has prepared this plan may have been certain delegated executives or a Sales Engineering Department termed as such or perhaps as a "Sales Planning Department," a "Merchandising Department," or a "Merchandising Control Department."

In the Taylor System the Engineering Department first prepares drawings for the product and for special machinery, tools, dies, etc.; and prepares lists of materials, specifications, etc.

This approved plan takes the form of what may be termed "Master Schedules," which instruct and coordinate production, finance and selling.

SALES OPERATING

Having been provided with the approved general sales policy (master sales schedules) which it may have had a share in formulating, the Sales Operating Department plans its work of execution, first providing for control of execution in order to assure precision in its work.

The first major function of sales operation is, therefore, planning the operations and their control.

In the Taylor System the production order, accompanied by the drawings, lists of materials, etc., goes first to the Planning Room.

This planning and control function divides naturally into:—

1. Analysis
2. Making Sales Schedules
3. Carrying out the Detail Schedules
4. Checking Results
5. Improving Methods.

I. *Analysis*

a) Analysis of the information gathered by the preliminary survey concerning the market, the product, competitive products, service that the product and the organization may render to customers, etc. From this analysis results:

b) The laying out of a definite procedure for the sale and distribution of the product. This includes the plan for the extent and composition of the elements that are to constitute the selling organization including its field executives and salesmen.

c) Information is classified and a list prepared of the supplies, equipment and samples or stock required by the several units which are to carry on the selling and distribution of the product.

In the Taylor System the first process in the Planning Room is analysis of the production order and the specifications by the Production Clerk, who lays out a general plan of production, and is responsible for subsequent processes in the planning room, and for modification of plans to meet emergency situations.

d) Responsibility and method is determined upon for the selection of supervisors and salesmen, their training and assignment to territories and duties, also for the education of dealers, and distribution of the product to branches, to customers direct or through general distribution centers or warehouses.

e) Analysis for the purpose of such preparation is followed by continuous analysis of performance based on summaries of branch office and Home Office records, from the angles of sales volume, distribution as to territory and as to commodities, and facts and figures presented by the financial, production and sales engineering departments.

These may result in:

f) Periodical recommendations concerning changes in the method of selling, distribution, or of remuneration of various elements of the sales force; possible changes in the general sales policy or at least in its application, also possible changes or improvements in the product itself.

2. *Making Detail Schedules*

a) To execute the sales plan laid out as a result of the analysis outlined, detail schedules are prepared.

The various processes referred to are timed so as to properly coordinate, and are possibly charted graphically.

Thus it is decided, based materially as to the time when necessary product and finances are to be available, when advertising begins; its volume and character; when the training of field executives and salesmen is to begin; the extent of such training; when shipments to warehouse or agency are to begin if the plan provides other than direct shipment to customers on actual sale orders, etc.

In the Taylor System a corresponding function is performed by the Route Clerk, who makes route charts, route sheets, prepares purchase orders, instruction cards, move-material and work-order slips, but does not issue them or start work on the production order.

In this way a detail schedule is laid out for each operation which forms part of the general marketing plan.

b) Instructions in detail, and the supplies of all kinds that they require, are prepared and assembled for the carrying out of every planned step. These include instructions for each unit, such as the field instructors, supervisors, agency managers and salesmen. Also material for the instruction of salesmen and of dealers; advertising material; material for service to dealers or customers; arrangement of selling territories and salesmen's routes; provision for samples and expense funds, etc.

3. *Carrying Out the Detail Schedules*

The detail work of planning having been completed, the actual work of marketing the product is started, under the supervision and control of the General Sales Manager.

a) Field executives, if required, are selected.

b) With their assistance, otherwise by the sales operating department heads delegated for the duty, salesmen are selected.

c) Instructions and supplies are issued to the training section and training begins.

d) Assignment to territories is made at time of selection, or as the results of the training course develop.

e) Samples, advertising matter to be carried, order and report forms and other supplies needed are issued to salesmen and they begin work. Expense funds are established at the same time.

In the Taylor System a corresponding function is that of the Order of Work Clerk, who takes the move-material and work-order slips previously prepared by the Route Clerk and issues them; i. e., starts work. He arranges the order of work and keeps a balance of work record; he arranges who shall do what, and when, in accordance with the plans.

f) As provided by the time schedule determined upon, instructions are sent at the proper time to the traffic and shipping department or warehouses, advising them what initial stock shipments to make or advising them to be in readiness to execute any certain predetermined plan of executing orders for stock or delivery on sales.

g) In like manner activity is started among all operating units.

4. *Checking Results*

Results are assured only by constantly checking performance against plans—actual sales against estimated sales or quotas, costs of selling against estimated costs, etc., not only as to totals but as to each operating unit or section of territory.

a) The reports of the work of the various operating units, and particularly of each branch, dealer and salesmen are secured for reasonably short periods that can be compared with corresponding periods. These are tabulated and summarized and compared, performance against plan, and performance against previous performances, and supplied to both administrative executives and executives in charge of units concerned.

In the Taylor System the corresponding functions are performed by the Progress Record Clerks, and the Cost Clerks, who check progress and costs as work is performed; and by the inspectors in the shop, who inspect for quality and quantity.

b) Costs as shown by reports from field executives, branches and even salesmen, and figures supplied by the auditing and accounting departments are tabulated, summarized, set over against budget estimates and previous costs, worked out in actual amounts and in percentage as to sales. These and similar reports and statistics are supplied to the administrative heads of the business and to the heads of the field activities concerned.

5. *Improving Methods*

Aside from the analysis first referred to, and the checking of results, there are in many organizations provisions for the improvement of methods, such as:

a) Investigations for improving selling technique—methods of personal salesmanship, demonstrations, preparations of selling portfolios by salesmen themselves from material and testimony secured from the consumer or dealer; methods of service to customers, etc. Even time studies of sales operations are being made.

In the Taylor System this function is performed by specialized investigators—methods, time study and rate setting specialists.

b) Investigations for determining rates and also methods of remuneration, especially if a commission plan, or salary and bonus, or any other form of compensation is in use or under consideration whereby the amount earned is affected by the sales performance of the individual.

CONCLUSION AND QUERY

If it is discovered that the sequence of functions involved in selling, as developed by common practice, are analogous to the sequence of functions involved in production and recognized by scientific management technique, is it not probable that the principles of scientific management as developed for the shop in the Taylor System may be applicable in the selling department; and further, is it not probable that many of the actual *methods* of planning and control now used in the shop may be adapted to the use of the sales department? It is to attempt to find an answer to this question that the further work of this committee is directed; and to that end the cooperation of all sales executives is essential.

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Harry Vincent
McElwain, Morse & Rogers, New York.

H. S. Person
Managing Director, Taylor Society, New York.

A SALES EXECUTIVES SECTION

IN response to a vote passed at the June 25 Conference of Sales Executives, the Board of Directors announces its approval of the establishment of a Sales Executives' Section of the Taylor Society. The purpose of this section is to afford sales managers an opportunity to study their problems from the point of view of scientific management, in association not only with other sales managers but also with production managers and engineers who have had experience in the development of scientific management in the shop.

Membership in the Taylor Society is a prerequisite to membership in the Sales Executives' Section.

Charles J. Crockett, American Lady Corset Co., Detroit, Mich., Chairman, Willard E. Freeland, Winchester Repeating Arms Co., New Haven, Conn., E. St. Elmo Lewis, Campbell-Ewald Co., New York, and F. R. Wallace, Street and Finney, New York, are appointed a committee to supervise the organization of this section.

Sales executives who are interested should address any one of the above committee or the Managing Director, Taylor Society, 29 W. Thirty-ninth St., New York.

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A SOCIETY TO PROMOTE THE SCIENCE AND THE
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